Applicant: Christoph Brabec et al. Attorney's Docket No.: 21928-006US1 / SA-05US

Serial No.: 10/524,964

Filed: September 26, 2005

Page : 2 of 6

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for treating a photovoltaically active layer that includes a polymer and a fullerene, the method comprising:

with a solvent and/or by annealing, characterized in that said heating the photovoltaically active layer comes into contact with solvent molecules and/or is heated to a temperature of at least 70°C.

- 2. (Currently Amended) The method as defined in claim 1, wherein said photovoltaically active layer is a polyalkylthiophene that is present in mixture with an additive such as a fullerene, particularly a the fullerene comprises a methanofullerene.
- 3. (Currently Amended) The method as defined in either of claim 1, wherein [[said]] the photovoltaically active layer is exposed to a solvent vapor.
- 4. (Currently Amended) The method as defined in claim 3, wherein [[said]] <u>the photovoltaically</u> active layer is exposed to [[said]] <u>the solvent vapor at room temperature</u>.
- 5. (Currently Amended) The method as defined in claim [[1]] 3, wherein [[said]] the photovoltaically active layer is exposed to [[said]] the solvent vapor for no longer than one minute.
- 6. (Currently Amended) The method as defined in claim [[1]] 3, wherein [[said]] the solvent comprises a solvent selected from the group consisting of xylene, toluene, butanone, and/or

Applicant: Christoph Brabec et al. Attorney's Docket No.: 21928-006US1 / SA-05US

Serial No.: 10/524,964

Filed: September 26, 2005

Page : 3 of 6

chloroform, and mixtures thereof and/or a further solvent and/or an arbitrary mixture of said solvents at least partially etches or softens said polyalkylthiophene.

- 7. (Currently Amended) The method as defined in claim 1, wherein [[said]] the photovoltaically active layer is annealed at heated to a temperature of at least [[70]] 80°C.
- (Cancelled).
- 9. (Currently Amended) A method of treating a photovoltaically active layer that includes a polymer and a fullerene, the method comprising:

 contacting the photovoltaically active layer with a solvent molecules vapor.
- 10. (Currently Amended) The method as defined in claim 9, wherein the photovoltaically active layer polymer comprises[[:]] a polyalkylthiophene[[;]], and [[a]]the fullerene is mixed with the polyalkylthiophene.
- 11. (Previously Presented) The method of claim 10, wherein the fullerene comprises a methanofullerene.
- 12. (Currently Amended) The method of claim 9, wherein the solvent comprises photovoltaically active layer contacts the solvent vapor at room temperature.
- 13. (Cancelled).
- 14. (Previously Presented) The method of claim 11, wherein the photovoltaically active layer contacts the solvent vapor for no longer than one minute.

Applicant: Christoph Brabec et al. Attorney's Docket No.: 21928-006US1 / SA-05US

Serial No.: 10/524,964

Filed: September 26, 2005

Page : 4 of 6

15. (Currently Amended) The method of claim 9, wherein the solvent comprises at least one solvent selected from the group consisting of xylene, toluene, butanone, [[and]] chloroform and mixtures thereof.

- 16. (Currently Amended) The method of claim 9, wherein the solvent at least partially etches or softens the polyalkylthiophene polymer.
- 17. (Currently Amended) The method of claim 9, further comprising annealing heating the photovoltaically active layer.
- 18. (Currently Amended) The method of claim 17, wherein the photovoltaically active layer is annealed at heated to a temperature of at least 70°C.
- 19. (Previously Presented) The method of claim 9, wherein, after treating, the photovoltaically active layer has an absorption maximum in the deep red region.
- 20. (Currently Amended) A method of treating a photovoltaically active layer <u>that includes a polyalkylthiophene and a methanofullerene</u>, comprising:

heating the photovoltaically active layer at a temperature of at least 70°C.

- 21. (Previously Presented) The method of claim 20, wherein, after treating, the photovoltaically active layer has an absorption maximum in the deep red region.
- 22. (Previously Presented) The method of claim 1, wherein, after treating, said photovoltaically active layer has an absorption maximum in the deep red region.